

CLAIMS

1. A method of generating an image comprising a position identifying pattern and content the method comprising the steps of:
defining criteria relating to a region where the content and the
5 pattern are superimposed, the criteria determining whether the pattern will be distinguishable over the content when applied to a product;
identifying such a region in the image; and
selecting a characteristic of the pattern or the content in the region
on the basis of the criteria, such that the image in the region meets the
10 criteria.
2. A method according to claim 1 wherein the characteristic is a characteristic of the pattern.
- 15 3. A method according to claim 2 wherein the characteristic of the pattern within the region is selected depending on the density of the content within the region.
4. A method according to claim 3 wherein the pattern is made up of a
20 plurality of pattern elements and the characteristic is the density of each of the pattern elements.
5. A method according to claim 4 wherein the density of each of the pattern elements is selected a high density and a low density.
- 25 6. A method according to claim 5 wherein the high density corresponds to the pattern elements being substantially covered with marking material, when the image is applied to a product.

7. A method according to claim 5 or claim 6 wherein the low density corresponds to the pattern elements being left substantially free of marking material, when the image is applied to a product.
- 5 8. A method according to claim 7 including defining a size of each of the pattern elements, the size depending on whether the pattern element is high density or low density.
9. A method according to any of claims 4 to 8 further comprising
10 classifying the content within the region as high density or low density, and selecting the low pattern element density if the content is high density, and the high pattern element density if the content is low density.
10. A method according to claim 9 wherein the content within said
15 region is classified as high, low or intermediate density, and the method further comprises modifying the content in the intermediate density content regions to make it higher or lower density thereby to maintain contrast between the content and the pattern in the intermediate density regions.
- 20 11. A method according to claim 1 wherein the characteristic is a characteristic of the content.
12. A method according to claim 11 wherein, the characteristic is the density of the content, which is limited to at least one predetermined range
25 to maintain contrast between the content and the pattern within the region.
13. A method according to any foregoing claim wherein the image is applied to a product using a marking material, the marking material being the same for the pattern and the content.

14. A method according to claim 11 wherein the characteristic of the content is the nature of the marking material to be used when applying the content to a product.

5 15. A method according to claim 14 wherein the marking material is selected to be different from that selected for applying the pattern to the product.

10 16. A method according to any foregoing claim further comprising applying the image to a product.

17. A method according to claim 16 wherein the pattern and the content are applied to the product in a one-pass process.

15 18. A method according to claim 16 or claim 17 wherein the pattern and the content are applied to the product by a printer.

19. A system for generating an image comprising a position identifying pattern and content the system being arranged to:

20 have access to criteria relating to a region where the content and the pattern are superimposed, the criteria determining whether the pattern will be distinguishable over the content when applied to a product;

identify such a region in the image; and

25 select a characteristic of the pattern or the content in the region on the basis of the criteria, such that the image in the region meets the criteria.

20. A system according to claim 19 further comprising a marking device arranged to apply the image to a product.

21. A system according to claim 20 wherein the marking device is a printer.

22. A system according to claim 20 or claim 21 wherein the marking
5 device is arranged to apply the pattern and the content using the same marking material.

23. A system according to any of claims 20 to 22 wherein the marking
10 device is arranged to apply the pattern and the content to the product in a one-pass process.

24. An image having a plurality of regions, each region having content
characteristics defining the content within it and pattern characteristics
defining the pattern within it, wherein the pattern characteristics and the
15 content characteristics are co-ordinated such that each region of the image meets predetermined criteria whereby the pattern is distinguishable over the content.

25. A method of identifying a position identifying pattern on a product,
20 the product having an image thereon including the position identifying pattern and a content feature, the method comprising the steps of:

analysing regions of the image to classify them as either a high
density region or a low density region,

for either the high or low density regions inverting the image, and
25 processing the image to identify the position identifying pattern.

26. A system for identifying a position identifying pattern on a product,
the product having an image thereon including the position identifying
pattern and a content feature, the system comprising sensing means

arranged to sense a number of regions of the image, and processing means arranged:

to analyse each of the regions to classify it as either a high density region or a low density region;

5 for either the high density regions or the low density regions, to invert the image of that area, and

to process the image to identify the position identifying pattern therein.

10 27. A data carrier carrying data arranged to control a computer system to perform the method according to any of claims 1 to 18.

28. A data carrier carrying data arranged to control a position identifying system to perform the method according to claim 25.

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29. A data carrier carrying data arranged to control a marking system to operate as a system according to any of claims 19 to 23.

20 30. A data carrier carrying data arranged to control a computer system to operate as a system according to claim 26.